

IN THE CLAIMS:

Please amend claims 1-11, 13-18, and 20 to read as follows:

- Sub B7  
A2
- 10022123-121301
1. (Amended) A method for improving the performance of an RF power amplifier circuit comprising:
    - sensing a collector current in an input stage transistor;
    - feeding a current equal or proportional to said input stage transistor collector current to an output stage bias circuit to boost the bias of an output stage;
    - wherein the input stage transistor is operated in a class AB mode, and said output stage is fed through a matching network.
  2. (Amended) The method of claim 1, wherein the input stage transistor collector current is sensed and fed to the output stage bias circuit via a current mirror.
  3. (Amended) The method of claim 2, wherein one transistor comprising said current mirror is connected in series with a transistor that itself forms a second current mirror with the input stage transistor.
  4. (Amended) The method of claim 3, wherein the amplifier circuit comprises plural bipolar junction transistors (BJTs).
  5. (Amended) The method of claim 3, wherein the amplifier circuit comprises plural field effect transistors (FETs).
  6. (Amended) The method of claim 3, wherein the amplifier circuit comprises a combination of BJTs and FETs.
  7. (Amended) A transistor circuit, comprising:
    - an input stage;
    - an output stage with a biasing circuit; and

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- 1021-1303

A3

AB  
an input sensor, arranged to sense an input signal to the amplification circuit; and  
an output stage booster, arranged to boost a bias of an output stage of the  
amplification circuit in proportion to said input signal.

19. The subcircuit of claim 18, where the input signal is an RF signal.

AB  
20. (Amended) The subcircuit of claim 19, where the input sensor is a current  
mirror.

Please add new claims 21-26 as follows;

10022123 "121301  
AB  
21. (New) A bias boosting subcircuit for a multi-stage power amplifier circuit, said  
multistage power amplifier comprising at least an input stage and an output stage,  
said subcircuit comprising:  
two matched BJTs in a first current mirror,  
wherein the first current mirror senses a collector current of an amplifying transistor  
in the input stage, and feeds an equal or proportional current to a bias circuit of the  
output stage.

22. (New) The subcircuit of claim 21, where one of the transistors of the first current  
mirror is connected in series with a third transistor, said third transistor itself forming  
a second current mirror with the input stage amplifying transistor.

23. (New) The subcircuit of claim 22, where the first current mirror comprises two  
matched PNP BJTs, and the second current mirror comprises two matched NPN  
BJTs.



where one transistor of said third stage comprises a collector of said second transistor, a base of said second transistor, and a mirror.

26. (New) The subcircuit of claim 25, where said output stage also comprises an NPN transistor that is itself part of a current mirror.

**106-1-1-10**